

Variation in pancreatic cancer care in the Netherlands

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VALORIZATION



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INTRODUCTION

This thesis describes several aspects of the surgical treatment of pancreatic cancer in the Netherlands. The aim was to identify variation and possible reasons for variation in preoperative, operative and postoperative treatment of non-metastasized pancreatic cancer in the Netherlands. By addressing these reasons for variation, and thereby reducing variation between centers, pancreatic cancer care may be improved.

SOCIAL AND ECONOMIC RELEVANCE OF SCIENTIFIC RESULTS

Pancreatic cancer is known for its poor survival. Optimal treatment consists of surgical resection with adjuvant chemotherapy.¹ Survival is likely to increase by combining these therapies.² The current thesis provides insights in treatment variations between centers in the Netherlands and answers the question which factors influence the likelihood for surgical treatment and adjuvant chemotherapy treatment in patients without metastatic disease. By knowing these influences, clinicians can optimize the selection process for pancreatoduodenectomy and possibly reduce the variation in treatment. Subsequently, the number of patients treated with curative intention may be increased.

A pancreatoduodenectomy, the surgical treatment for most types of pancreatic cancer, is known as a procedure with a relatively high morbidity rate.¹ Preoperatively identifying high-risk patients might result in the ability to improve the selection of patients fit for surgery. This thesis suggests that muscle radiation attenuation assessment at preoperative CT scans may be a useful tool to detect cachexia prior to surgery. Furthermore, the current thesis shows that a relatively high percentage of patients still undergo preoperative biliary drainage, resulting in a higher rate of complications compared to early surgery.³ These insights provide arguments for clinicians to optimize the current care pathways.

The costs of a pancreatoduodenectomy are substantial, with a median of around €17.500 if no complication occurs. The total hospital costs will increase with 34% up to 71% if complications occur.⁴ This can be an additional argument for optimizing perioperative care. Improving pancreatic cancer care for elderly patients might lead to more elderly patients being selected for surgical treatment and thereby may reduce variation in care.^{5,6} This thesis showed that an enhanced recovery pathway is feasible in elderly patients.

If postoperative recovery in elderly patients is improved, it might lead to more patients being treated with adjuvant chemotherapy following the Dutch guidelines.⁷ In this thesis it is shown that the ERAS principles can be safely applied to the elderly population.

TARGET POPULATION

Results of this thesis are relevant for patients and clinicians involved in the treatment of pancreatic cancer. It provides insights in the current variation in care and gives suggestions on how to reduce this variation in patients with non-metastasized pancreatic-cancer.

INNOVATION AND FUTURE

Pancreatic centers in the Netherlands collaborate in the Dutch Pancreatic Cancer Group (DPCG). Research in pancreatic cancer, such as the Dutch Pancreatic Cancer Project (PACAP), is initiated and coordinated by this national panel of experts consisting of oncological surgeons, oncologists, gastroenterologists, radiologists, radiation therapists, pathologists, specialized nurses and dieticians. PACAP includes prospective data registration, a pancreatic biobank, and clinical studies.

This thesis showed that patients diagnosed in a specialized pancreatic center had a twofold higher likelihood for undergoing surgical resection, which suggests that an up-to-date level of knowledge is necessary to provide an optimal diagnostic and treatment procedure.⁸ Ideally, each patient receives the best of care independent of hospital of diagnosis or hospital of treatment. Also quality-of-life should be addressed in pancreatic cancer patients.⁹ Psychological and social support may improve postoperative quality-of-life and optimize fitness of a patient to undergo treatment.^{9,10}

Non-specialized centers and specialized centers should be able to share patient data and discuss the best treatment options for each patient. This might be achieved in regional multidisciplinary tumor boards with easy access to expert opinions. It can reduce the number of patients undergoing preoperative biliary drainage and it will most probably increase the number of patients undergoing surgical resection and adjuvant chemotherapy. Examples of regional expert teams in the Netherlands are Oncozon, EMBRAZE and GIOCA.^{11, 12}

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